

Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the present application.

Listing of Claims:

1. (Currently Amended) Apparatus for a communication system in which data is communicated ~~between~~ with a first communication station and at least a second communication station upon a traffic channel, said apparatus for facilitating selection of resource allocation in the communication system, the resource allocation defined in terms of a first communication indicia and a second communication indicia, said apparatus comprising:

a storage device having memory locations for storing a matrix defined in a first dimension by values of the first communication indicia and in a second dimension by the second communication indicia, each element of the matrix of an exemplary threshold value;

a comparator coupled to said storage device, said comparator for comparing a traffic-channel threshold value representative of communication upon the traffic channel with at least some of the exemplary threshold values of the matrix stored at the memory location of said storage device and for iteratively comparing the exemplary threshold values contained in the matrix to the traffic channel threshold to locate a selected exemplary threshold value of a selected magnitude relative to the traffic channel threshold; and

a selector coupled to said comparator, said selector for selecting the resource allocation responsive to comparisons made by said comparator and location of the selected exemplary threshold value, the resource allocation defined in terms of both the first communication indicia and the second communication indicia ~~associated~~ that defines location of the selected exemplary threshold in the matrix, with a the selected one of the exemplary threshold values value.

2. (Original).The apparatus of claim 1 wherein the communication system comprises a multi-code, multi-rate communication system, wherein the first communication indicia comprises a coding indicia, and wherein the matrix stored at said storage device is defined, in part, by values of the coding indicia.

3. (Currently Amended) The apparatus of claim 2 wherein the communication system comprises a CDMA (code-division, multiple-access) communication system ~~which~~ that utilizes Walsh coding with N codes and wherein the coding indicia ~~which~~ that defines, in part, the matrix stored at said storage device defined, in part, by values of N.

4. (Original) The apparatus of claim 1 wherein the communication system comprises a multi-rate, multi-code communication system, wherein the second communication indicia comprises a modulation coding scheme (MCS) value, and wherein the matrix stored at said storage device is defined, in part, by values of the modulation coding scheme.

5. (Original) The apparatus of claim 4 wherein each value of the modulation coding scheme is representative of a level of modulation coding by which data to be communicated upon the traffic channel is to be encoded.

6. (Currently Amended) The apparatus of claim 1 wherein the communication system comprises a radio communication system having network infrastructure, wherein the ~~first~~ communication station forms a portion of the network infrastructure and the ~~second communication station comprises~~ communication system further comprising a mobile station, and wherein said storage device at which the matrix is stored is located at the network infrastructure.

7. (Original) The apparatus of claim 6 wherein the network infrastructure comprises a base transceiver station (BTS) and wherein said storage device is located at the base transceiver station.

8. (Original) The apparatus of claim 1 wherein the traffic channel threshold value which said comparator compares with at least some of the exemplary threshold values comprises a value representative of communication quality levels of the traffic channel.

9. (Currently Amended) The apparatus of claim 8 wherein communications ~~by~~ with the first communication station ~~to the second communication station~~ are effectuated upon a forward link, ~~wherein communications by the second communication station to the first communication station are effectuated upon a reverse link,~~ and wherein the traffic channel threshold value is representative of communication quality levels upon the forward link.

10. (Currently Amended) The apparatus of claim 9 wherein the traffic channel threshold value is of a level responsive to ~~measurements made by the second communication station~~ measured values of forward link communication conditions.

11. (Original) The apparatus of claim 10 wherein the traffic channel threshold value is representative of a signal-to-noise ratio on the forward link.

12. (Currently Amended) The apparatus of claim 1 further comprising a coder and modulator coupled to said selector, said coder and modulator for coding and modulating the data to be communicated upon the traffic channel responsive to values of the first and second communication indicia, respectively, associated with the selected ~~one of the exemplary threshold values~~ value.

13. (Previously Amended) The apparatus of claim 12 wherein said coder and modulator is further for performing Walsh-code spreading, the Walsh-code spreading defined in terms of a number N of Walsh codes by which to spread the data.

14. (Currently Amended) The apparatus of claim 1 wherein the communication system comprises a multi-user communication system, wherein ~~at least the second communication station comprises the second communication station and at least a third communication station,~~ ~~data communicated between the first and second communication station, respectively, and between the first and third communication stations, respectively, upon~~ the traffic channel

comprises a shared channel; said apparatus further comprising a scheduler for scheduling access to the shared channel upon which to communicate the data ~~between the first and second communication stations and between the first and third communication stations.~~

15. (Original) The apparatus of claim 14 wherein said scheduler schedules the access to the shared channel responsive, in part, to the traffic channel threshold value.

16. (Original) The apparatus of claim 15 wherein the data communicated during operation of the communication system comprises packet data, said apparatus further comprising a timer for timing periods of pendency of packet data prior to access to the shared channel to communicate the packet data thereon.

17. (Original) The apparatus of claim 16 wherein said scheduler schedules the access to the shared channel further responsive, in part, to the periods of pendency timed by said timer.

18. (Original) The apparatus of claim 17 further comprising a buffer for storing the packets of data, said timer for timing pendency of the packet data at said buffer.

19. (Original) The apparatus of claim 17 wherein communications in the communication system are effectuated at a selected QoS (quality of service) level and wherein scheduling made by said scheduler is further responsive, in part, to the selected QoS level.

20. (Currently Amended) A method for communicating data ~~between~~ with a first communication station ~~and at least a second communication station~~ upon a traffic channel defined in a communication system, said method for facilitating selection of resource allocation in the communication system, the resource allocation defined in terms of a first communication indicia and a second communication indicia, said method comprising the operations of:

forming a matrix of exemplary threshold values, the exemplary threshold values each indexed by values of the first communication indicia in a first dimension and the second communication indicia in a second dimension;

comparing a traffic channel threshold value representative of communication upon the traffic channel with at least some of the exemplary threshold values of the matrix formed during said operation of forming and iteratively comparing the exemplary threshold values contained in the matrix to the traffic channel threshold to locate a selected exemplary threshold value of a selected magnitude relative to the traffic channel threshold;

selecting, responsive to comparisons formed during said operation of comparing and location of the selected exemplary threshold value, the resource allocation, the resource allocation defined in terms of both the first communication indicia and the second communication indicia associated that defines location of the selected exemplary threshold value in the matrix with a the selected one of the exemplary threshold values value; and

operating upon the data using the first communication indicia and the second communication indicia in terms of which the resource allocation selected during said operation of selecting is defined.

21. (Currently Amended) The method of claim 20 wherein the communication system comprises a multi-user communication system, ~~wherein at least the second communication station comprises the second communication station and at least a third communication station, data communicated between the first and second communication stations, respectively, and between the first and third communication stations, respectively, upon a~~ wherein the traffic channel comprises a shared channel; said method further comprising the operation of scheduling access to the shared channel upon which to communicate the data ~~between the first and second communication stations and between the first and third communication stations.~~